



June 21, 2006

Mr. Doug Balog  
Water Management Program  
Pennsylvania Department of Environmental Protection  
230 Chestnut Street  
Meadville, Pennsylvania 16335

**Subject: Groundwater Filtration System at Whittaker Remediation Site (Revised)  
Reynolds Industrial Park, Transfer, Pennsylvania**

Dear Mr. Balog:

As discussed previously on June 9 and June 15, 2006, EnergySolutions, LLC, on behalf of our client, the Whittaker Corp., plans on installing a water filtration system to treat groundwater containing suspended radioactive sediments. Excavation of a majority of the radioactive soils in the area of interest has resulted in a pit infiltrated with approximately 35,000 gallons of groundwater. The remaining volume of radioactive material, estimated at about 100 cubic feet, cannot be efficiently excavated because the material is a fine sediment-type material that becomes suspended in the water when agitated.

As such, EnergySolutions is seeking an approval from the PA DEP to intentionally suspend the material with mechanical methods, draw groundwater from the pit, and run it through the filtration process described below. The filtration process will result in the removal of the radioactive solids. Current plans are to discharge the filtered water back into the excavation to provide agitation to keep sediments suspended but we do have the ability to discharge the filtered water directly into the Shenango River. Sediments and contaminated filter media will be managed and disposed of as low-level radioactive waste (LLRW).

Previously we discussed the need to also treat TCE as it is a groundwater contaminant associated with the entire Reynolds Industrial Park. However, in a recent sample of the water from the excavated area indicate that TCE concentrations are below laboratory detection limits using EPA analytical method SW846 8260B with a reporting limit of 5.0 ug/L. Because of these results, EnergySolutions has removed the carbon filters from the filtration system previously described. A copy of the laboratory report is attached.

## **Filtration System**

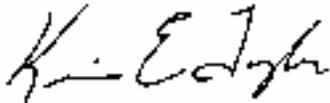
The flow of the filtration system is described provided in the enclosed diagram. The proposed flow rate is 400 gallons per minute (gpm). The filtration system will be provided by Rain for Rent out of Cleveland, Ohio.

The initial filtration will be performed by a sand media filter consisting of two 48-inch filter tanks that provide 25 square feet of filtration area. An information sheet on this filter is enclosed. These filters will be backwashed directly into a B-25 radioactive waste container where the sediments will be allowed to settle. The water in the B-25 will be suctioned off the top and discharged back into the excavation.

The sand filter will be followed by a dual bag and cartridge filter. The system contains four 1-micron bag filters and two replaceable 0.5-micron cartridge filters. Bag filters and cartridge filters will likely require to be managed as radioactive waste.

EnergySolutions hopes to begin the water treatment operations as soon as possible. Rain for Rent has stated that they will be able to set up the filtration system on Monday June 26. We would appreciate a quick response to this request. If you have any questions, please give me a call at (864) 235-3695.

Sincerely,



Kevin E. Taylor, PE, CHP  
EnergySolutions Project Health Physicist  
Whittaker License RSO

Enclosures (3)

Cc: Jerry Toumey, EnergySolutions  
Pat Horkman, EnergySolutions